

**Illinois-American Water Company, Inc.**

Cost of Equity  
as of May 31, 2016

**Market Models (DCF, RP & CAPM)**

<b>Discounted Cash Flow (DCF)</b>	$D_1/P_0^{(1)} + g^{(2)} + lev.^{(3)} = k$
Water Group	2.53% + 6.25% + 0.94% = 9.72%
<b>Risk Premium (RP)</b>	$I^{(4)} + RP^{(5)} = k$
Water Group	4.90% + 6.50% = 11.40%
<b>Capital Asset Pricing Model (CAPM)</b>	$Rf^{(6)} + \beta^{(7)} \times (Rm - Rf^{(8)}) + size^{(9)} = k$
Water Group	3.50% + 0.82 x ( 7.84% ) + 1.10% = 11.03%

**Book Value Method**

<b>Comparable Earnings (CE)</b> <sup>(10)</sup>	<b>Historical</b>	<b>Forecast</b>	<b>Average</b>
Comparable Earnings Group	10.1%	12.2%	11.15%

- References
- <sup>(1)</sup> Schedule 5, page 1
  - <sup>(2)</sup> Schedule 7, page 1
  - <sup>(3)</sup> Schedule 8, page 1
  - <sup>(4)</sup> A-rated public utility bond yield comprised of a 3.50% risk-free rate of return (Schedule 11, page 2) and a yield spread of 1.40% (Schedule 9, page 3)
  - <sup>(5)</sup> Schedule 10, page 1
  - <sup>(6)</sup> Schedule 11, page 2
  - <sup>(7)</sup> Schedule 8, page 1
  - <sup>(8)</sup> Schedule 11, page 2
  - <sup>(9)</sup> Schedule 11, page 3
  - <sup>(10)</sup> Schedule 12, page 2

**Monthly Dividend Yields for  
Water Group  
for the Twelve Months Ending May 2016**

<u>Company</u>	<u>Jun-15</u>	<u>Jul-15</u>	<u>Aug-15</u>	<u>Sep-15</u>	<u>Oct-15</u>	<u>Nov-15</u>	<u>Dec-15</u>	<u>Jan-16</u>	<u>Feb-16</u>	<u>Mar-16</u>	<u>Apr-16</u>	<u>May-16</u>	<u>12-Month Average</u>	<u>6-Month Average</u>	<u>3-Month Average</u>
American States Water Co (AWR)	2.29%	2.34%	2.38%	2.17%	2.21%	2.14%	2.14%	1.98%	2.11%	2.28%	2.16%	2.30%	2.20%	2.14%	2.18%
American Water Works Co Inc (AWK)	2.81%	2.64%	2.62%	2.48%	2.38%	2.36%	2.28%	2.11%	2.10%	1.98%	2.07%	2.03%	2.35%	2.15%	2.05%
Aqua America Inc (WTR)	2.70%	2.82%	2.81%	2.70%	2.50%	2.43%	2.40%	2.27%	2.33%	2.24%	2.26%	2.21%	2.50%	2.32%	2.28%
Artesian Resource Corp Class A (ARTNA)	4.17%	4.09%	3.98%	3.64%	3.67%	3.39%	3.22%	2.95%	3.14%	3.18%	3.36%	3.20%	3.53%	3.21%	3.23%
California Water Service Group (CWT)	2.94%	3.13%	3.25%	3.04%	3.02%	2.98%	2.89%	2.77%	2.80%	2.59%	2.48%	2.37%	2.90%	2.75%	2.62%
Connecticut Water Service Inc (CTWS)	3.02%	3.16%	3.08%	2.94%	2.92%	2.95%	2.82%	2.50%	2.57%	2.38%	2.41%	2.34%	2.80%	2.61%	2.45%
Middlesex Water Co (MSEX)	3.43%	3.41%	3.39%	3.24%	3.11%	3.11%	3.01%	2.76%	2.84%	2.59%	2.18%	2.15%	3.01%	2.75%	2.54%
SJW Corp (SJW)	2.55%	2.63%	2.72%	2.55%	2.47%	2.57%	2.64%	2.50%	2.24%	2.24%	2.37%	2.35%	2.50%	2.43%	2.28%
The York Water Co (YORW)	2.87%	2.81%	2.83%	2.85%	2.69%	2.62%	2.49%	2.34%	2.25%	2.04%	2.11%	2.32%	2.54%	2.31%	2.13%
<b>Average</b>	<b><u>2.98%</u></b>	<b><u>3.00%</u></b>	<b><u>3.01%</u></b>	<b><u>2.85%</u></b>	<b><u>2.77%</u></b>	<b><u>2.73%</u></b>	<b><u>2.65%</u></b>	<b><u>2.46%</u></b>	<b><u>2.49%</u></b>	<b><u>2.39%</u></b>	<b><u>2.38%</u></b>	<b><u>2.36%</u></b>	<b><u>2.67%</u></b>	<b><u>2.46%</u></b>	<b><u>2.38%</u></b>

Note: Monthly dividend yields are calculated by dividing the annualized quarterly dividend by the month-end closing stock price adjusted by the fraction of the ex-dividend.

Source of Information: <http://performance.morningstar.com/stock/performance-return>  
<http://www.nasdaq.com>

<b>Forward-looking Dividend Yield</b>	1/2 Growth	$D_0/P_0$	(.5g)	$D_1/P_0$	$K = \frac{D_0(1+g)^0 + D_0(1+g)^0 + D_0(1+g)^1 + D_0(1+g)^1}{P_0} + g$
		2.46%	1.031250	2.53%	
	Discrete	$D_0/P_0$	Adj.	$D_1/P_0$	$K = \frac{D_0(1+g)^{25} + D_0(1+g)^{50} + D_0(1+g)^{75} + D_0(1+g)^{100}}{P_0} + g$
		2.46%	1.038767	2.55%	
	Quarterly	$D_0/P_0$	Adj.	$D_1/P_0$	$K = \left[ 1 + \frac{D_0(1+g)^{25}}{P_0} \right]^4 - 1 + g$
	Average	0.6138%	1.015272	<u>2.52%</u>	
				2.53%	
	<b>Growth rate</b>			<u>6.25%</u>	
	<b>K</b>			<u>8.78%</u>	

**Historical Growth Rates**  
Earnings Per Share, Dividends Per Share,  
Book Value Per Share, and Cash Flow Per Share

Company	Earnings per Share		Dividends per Share		Book Value per Share		Cash Flow per Share	
	Value Line		Value Line		Value Line		Value Line	
	5 Year	10 Year	5 Year	10 Year	5 Year	10 Year	5 Year	10 Year
American States Water	12.00%	12.00%	10.00%	6.50%	6.00%	5.50%	8.00%	9.00%
American Water Works Co., Inc.	13.00%	-	10.00%	-	2.50%	-	9.00%	-
Aqua America, Inc.	13.00%	8.50%	7.50%	8.00%	7.00%	7.00%	8.00%	8.00%
Artesian Res. Corp.	3.00%	-	3.00%	-	4.00%	-	3.50%	-
California Water Serv. Grp.	4.00%	5.00%	2.00%	1.50%	5.00%	5.50%	5.50%	6.00%
Connecticut Water Services	9.00%	4.00%	2.00%	2.00%	9.50%	6.50%	7.50%	4.00%
Middlesex Water Company	5.50%	5.00%	1.50%	1.50%	3.00%	4.50%	4.50%	4.00%
SJW Corporation	15.00%	6.50%	2.50%	4.00%	5.00%	6.00%	10.00%	6.50%
York Water Company	6.00%	5.50%	2.50%	4.00%	4.50%	6.50%	6.50%	7.00%
Average	<u>8.94%</u>	<u>6.64%</u>	<u>4.56%</u>	<u>3.93%</u>	<u>5.17%</u>	<u>5.93%</u>	<u>6.94%</u>	<u>6.36%</u>

Source of Information: Value Line Investment Survey, April 15, 2016

**Analysts' Five-Year Projected Growth Rates**

Earnings Per Share, Dividends Per Share,  
Book Value Per Share, and Cash Flow Per Share

Company	I/B/E/S First Call	Zacks Earnings Per share	Morningstar Earnings Per share	Value Line				
				Earnings Per Share	Dividends Per Share	Book Value Per Share	Cash Flow Per Share	Percent Retained to Common Equity
American States Water	3.85%	3.90%	-	6.00%	7.00%	4.00%	6.00%	6.00%
American Water Works	7.27%	7.20%	7.10%	8.00%	10.50%	4.00%	5.50%	5.00%
Aqua America, Inc.	6.05%	6.40%	-	7.00%	9.00%	6.00%	6.00%	4.50%
Artesian Resources Corp.	4.00%	NA	-	-	-	-	-	-
California Water Serv. Grp.	9.05%	9.10%	-	6.00%	6.50%	4.00%	5.00%	4.00%
Connecticut Water Services	5.00%	5.00%	-	4.50%	4.50%	2.50%	4.00%	4.50%
Middlesex Water Company	2.70%	NA	-	3.50%	3.00%	4.00%	5.00%	3.00%
SJW Corporation	14.00%	NA	14.00%	1.50%	6.00%	6.00%	2.50%	4.00%
York Water Company	4.90%	NA	-	6.00%	6.50%	3.50%	6.00%	4.00%
Average	6.31%	6.32%	10.55%	5.31%	6.63%	4.25%	5.00%	4.38%

Source of Information : Yahoo First Call, June 2, 2016  
Zacks, June 2, 2016  
Morningstar, June 2, 2016

**Water Group**  
Financial Risk Adjustment

IAWC Ex. 10.02R  
Schedule 8 [1 of 1]

Fiscal Year			American States Water Co (NYSE:AWR)	American Water Works Co. (NYSE:AWK)	Aqua America Inc. (NYSE:WTR)	Artesian Resources Corp (NDS:ARTNA)	California Water Service Group (NYSE:CWT)	Connecticut Water Service (NDS:CTWS)	Middlesex Water Co. (NDS:MSEX)	SJW Corp (NYSE:SJW)	The York Water Company (NDS:YORW)	Average
			12/31/15	12/31/15	12/31/15	12/31/15	12/31/15	12/31/15	12/31/15	12/31/15	12/31/15	
<b>Capitalization at Fair Values</b>												
	Debt(D)		403,844	6,757,000	1,905,393	120,243	600,440	191,616	143,131	500,035	102,000	1,191,522
	Preferred(P)		0	18,000	0	0	0	772	2,436	0	0	2,356
	Equity(E)		<u>1,531,255</u>	<u>10,652,372</u>	<u>5,261,014</u>	<u>250,907</u>	<u>1,114,051</u>	<u>425,441</u>	<u>430,612</u>	<u>604,325</u>	<u>319,541</u>	<u>2,287,724</u>
	Total		<u>1,935,099</u>	<u>17,427,372</u>	<u>7,166,407</u>	<u>371,150</u>	<u>1,714,491</u>	<u>617,829</u>	<u>576,179</u>	<u>1,104,360</u>	<u>421,541</u>	<u>3,481,603</u>
<b>Capital Structure Ratios</b>												
	Debt(D)		20.87%	38.77%	26.59%	32.40%	35.02%	31.01%	24.84%	45.28%	24.20%	31.00%
	Preferred(P)		0.00%	0.10%	0.00%	0.00%	0.00%	0.12%	0.42%	0.00%	0.00%	0.07%
	Equity(E)		<u>79.13%</u>	<u>61.12%</u>	<u>73.41%</u>	<u>67.60%</u>	<u>64.98%</u>	<u>68.86%</u>	<u>74.74%</u>	<u>54.72%</u>	<u>75.80%</u>	<u>68.93%</u>
	Total		<u>100.00%</u>	<u>99.99%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>99.99%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>
<b>Common Stock</b>												
	Issued		36,501.914	180,907.483	179,363.660	9,058.000	47,875.000	11,192.882	16,225.000	20,381.949	12,812.377	
	Treasury		0.000	2,625.112	2,819.569	0.000	0.000	0.000	0.000	0.000	0.000	
	Outstanding		36,501.914	178,282.371	176,544.091	9,058.000	47,875.000	11,192.882	16,225.000	20,381.949	12,812.377	
	Market Price		\$41.95	\$59.75	\$29.80	\$27.70	\$23.27	\$38.01	\$26.54	\$29.65	\$24.94	
<b>Capitalization at Carrying Amounts</b>												
	Debt(D)		325,853	5,914,000	1,779,205	104,936	518,887	177,654	140,300	384,316	87,542	1,048,077
	Preferred(P)		0	13,000	0	0	0	772	2,436	0	0	1,801
	Equity(E)		<u>465,945</u>	<u>5,049,000</u>	<u>1,725,930</u>	<u>132,331</u>	<u>642,155</u>	<u>223,977</u>	<u>206,694</u>	<u>383,783</u>	<u>109,070</u>	<u>993,209</u>
	Total		<u>791,798</u>	<u>10,976,000</u>	<u>3,505,135</u>	<u>237,267</u>	<u>1,161,042</u>	<u>402,403</u>	<u>349,430</u>	<u>768,099</u>	<u>196,612</u>	<u>2,043,087</u>
<b>Capital Structure Ratios</b>												
	Debt(D)		41.15%	53.88%	50.76%	44.23%	44.69%	44.15%	40.15%	50.03%	44.53%	45.95%
	Preferred(P)		0.00%	0.12%	0.00%	0.00%	0.00%	0.19%	0.70%	0.00%	0.00%	0.11%
	Equity(E)		<u>58.85%</u>	<u>46.00%</u>	<u>49.24%</u>	<u>55.77%</u>	<u>55.31%</u>	<u>55.66%</u>	<u>59.15%</u>	<u>49.97%</u>	<u>55.47%</u>	<u>53.94%</u>
	Total		<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>
<b>Betas</b>												
	Value Line		0.75	0.70	0.75	0.55	0.75	0.60	0.70	0.75	0.70	0.69
<b>Hamada</b>												
	BI	=	Bu	[1+	(1 - t)	D/E	+	P/E	]			
	0.69	=	Bu	[1+	(1-0.35)	0.4497	+	0.0010	]			
	0.69	=	Bu	[1+	0.65	0.4497	+	0.0010	]			
	0.69	=	Bu	1.2933								
	0.53	=	Bu									
<b>Hamada</b>												
	BI	=	0.53	[1+	(1 - t)	D/E	+	P/E	]			
	BI	=	0.53	[1+	0.65	0.8520	+	0.0021	]			
	BI	=	0.53	1.5559								
	BI	=	0.82									
<b>M&amp;M</b>												
	ku	=	ke	-	((	ku	-	i	)	1-t	)	D / E
	7.73%	=	8.78%	-	((	7.73%	-	4.14%	)	0.65	)	31.00% / 68.93%
	7.73%	=	8.78%	-	((	3.59%			)	0.65	)	0.4497
	7.73%	=	8.78%	-	((	2.33%			)		)	0.4497
	7.73%	=	8.78%	-		1.05%					)	0.0010
												0.0010
<b>M&amp;M</b>												
	ke	=	ku	+	((	ku	-	i	)	1-t	)	D / E
	9.72%	=	7.73%	+	((	7.73%	-	4.14%	)	0.65	)	45.95% / 53.94%
	9.72%	=	7.73%	+	((	3.59%			)	0.65	)	0.8520
	9.72%	=	7.73%	+	((	2.33%			)		)	0.8520
	9.72%	=	7.73%	+		1.99%					)	0.0021
												0.0021

**Interest Rates for Investment Grade Public Utility Bonds**  
**Yearly for 2010-2014 and 2015**  
**and the Twelve Months Ended May 2016**

<u>Years</u>	<u>Aa Rated</u>	<u>A Rated</u>	<u>Baa Rated</u>	<u>Average</u>
2010	5.24%	5.46%	5.96%	5.55%
2011	4.78%	5.04%	5.57%	5.13%
2012	3.83%	4.13%	4.86%	4.27%
2013	4.24%	4.48%	4.98%	4.57%
2014	4.19%	4.28%	4.80%	4.42%
<b>Five-Year Average</b>	<u>4.46%</u>	<u>4.68%</u>	<u>5.23%</u>	<u>4.79%</u>
2015	4.00%	4.12%	5.03%	4.38%
 <b><u>Months</u></b>				
Jun-15	4.29%	4.39%	5.13%	4.60%
Jul-15	4.27%	4.40%	5.22%	4.63%
Aug-15	4.13%	4.25%	5.23%	4.54%
Sep-15	4.25%	4.39%	5.42%	4.68%
Oct-15	4.13%	4.29%	5.47%	4.63%
Nov-15	4.22%	4.40%	5.57%	4.73%
Dec-15	4.16%	4.35%	5.55%	4.69%
Jan-16	4.09%	4.27%	5.49%	4.62%
Feb-16	3.94%	4.11%	5.28%	4.44%
Mar-16	3.93%	4.16%	5.12%	4.40%
Apr-16	3.74%	4.00%	4.75%	4.16%
May-16	3.65%	3.93%	4.60%	4.06%
<b>Twelve-Month Average</b>	<u>4.07%</u>	<u>4.25%</u>	<u>5.24%</u>	<u>4.52%</u>
<b>Six-Month Average</b>	<u>3.92%</u>	<u>4.14%</u>	<u>5.13%</u>	<u>4.40%</u>
<b>Three-Month Average</b>	<u>3.77%</u>	<u>4.03%</u>	<u>4.82%</u>	<u>4.21%</u>

**A rated Public Utility Bonds over 30-Year Treasuries**

Year	A-rated	30-Year Treasuries		Year	A-rated	30-Year Treasuries		Year	A-rated	30-Year Treasuries		Year	A-rated	30-Year Treasuries		Year	A-rated	30-Year Treasuries	
	Public Utility	Yield	Spread		Public Utility	Yield	Spread		Public Utility	Yield	Spread		Public Utility	Yield	Spread		Public Utility	Yield	Spread
Jan-99	6.97%	5.16%	1.81%	Jan-03	7.07%			Jan-07	5.96%	4.85%	1.11%	Jan-11	5.57%	4.52%	1.05%	Jan-15	3.58%	2.46%	1.12%
Feb-99	7.09%	5.37%	1.72%	Feb-03	6.93%			Feb-07	5.90%	4.82%	1.08%	Feb-11	5.68%	4.65%	1.03%	Feb-15	3.67%	2.57%	1.10%
Mar-99	7.26%	5.58%	1.68%	Mar-03	6.79%			Mar-07	5.85%	4.72%	1.13%	Mar-11	5.56%	4.51%	1.05%	Mar-15	3.74%	2.63%	1.11%
Apr-99	7.22%	5.55%	1.67%	Apr-03	6.64%			Apr-07	5.97%	4.87%	1.10%	Apr-11	5.55%	4.50%	1.05%	Apr-15	3.75%	2.59%	1.16%
May-99	7.47%	5.81%	1.66%	May-03	6.36%			May-07	5.99%	4.90%	1.09%	May-11	5.32%	4.29%	1.03%	May-15	4.17%	2.96%	1.21%
Jun-99	7.74%	6.04%	1.70%	Jun-03	6.21%			Jun-07	6.30%	5.20%	1.10%	Jun-11	5.26%	4.23%	1.03%	Jun-15	4.39%	3.11%	1.28%
Jul-99	7.71%	5.98%	1.73%	Jul-03	6.57%			Jul-07	6.25%	5.11%	1.14%	Jul-11	5.27%	4.27%	1.00%	Jul-15	4.40%	3.07%	1.33%
Aug-99	7.91%	6.07%	1.84%	Aug-03	6.78%			Aug-07	6.24%	4.93%	1.31%	Aug-11	4.69%	3.65%	1.04%	Aug-15	4.25%	2.86%	1.39%
Sep-99	7.93%	6.07%	1.86%	Sep-03	6.56%			Sep-07	6.18%	4.79%	1.39%	Sep-11	4.48%	3.18%	1.30%	Sep-15	4.39%	2.95%	1.44%
Oct-99	8.06%	6.26%	1.80%	Oct-03	6.43%			Oct-07	6.11%	4.77%	1.34%	Oct-11	4.52%	3.13%	1.39%	Oct-15	4.29%	2.89%	1.40%
Nov-99	7.94%	6.15%	1.79%	Nov-03	6.37%			Nov-07	5.97%	4.52%	1.45%	Nov-11	4.25%	3.02%	1.23%	Nov-15	4.40%	3.03%	1.37%
Dec-99	8.14%	6.35%	1.79%	Dec-03	6.27%			Dec-07	6.16%	4.53%	1.63%	Dec-11	4.33%	2.98%	1.35%	Dec-15	4.35%	2.97%	1.38%
Jan-00	8.35%	6.63%	1.72%	Jan-04	6.15%			Jan-08	6.02%	4.33%	1.69%	Jan-12	4.34%	3.03%	1.31%	Jan-16	4.27%	2.86%	1.41%
Feb-00	8.25%	6.23%	2.02%	Feb-04	6.15%			Feb-08	6.21%	4.52%	1.69%	Feb-12	4.36%	3.11%	1.25%	Feb-16	4.11%	2.62%	1.49%
Mar-00	8.28%	6.05%	2.23%	Mar-04	5.97%			Mar-08	6.21%	4.39%	1.82%	Mar-12	4.48%	3.28%	1.20%	Mar-16	4.16%	2.68%	1.48%
Apr-00	8.29%	5.85%	2.44%	Apr-04	6.35%			Apr-08	6.29%	4.44%	1.85%	Apr-12	4.40%	3.18%	1.22%	Apr-16	4.00%	2.62%	1.38%
May-00	8.70%	6.15%	2.55%	May-04	6.62%			May-08	6.28%	4.60%	1.68%	May-12	4.20%	2.93%	1.27%	May-16	3.93%	2.63%	1.30%
Jun-00	8.36%	5.93%	2.43%	Jun-04	6.46%			Jun-08	6.38%	4.69%	1.69%	Jun-12	4.08%	2.70%	1.38%				
Jul-00	8.25%	5.85%	2.40%	Jul-04	6.27%			Jul-08	6.40%	4.57%	1.83%	Jul-12	3.93%	2.59%	1.34%				
Aug-00	8.13%	5.72%	2.41%	Aug-04	6.14%			Aug-08	6.37%	4.50%	1.87%	Aug-12	4.00%	2.77%	1.23%				
Sep-00	8.23%	5.83%	2.40%	Sep-04	5.98%			Sep-08	6.49%	4.27%	2.22%	Sep-12	4.02%	2.88%	1.14%	Average:			
Oct-00	8.14%	5.80%	2.34%	Oct-04	5.94%			Oct-08	7.56%	4.17%	3.39%	Oct-12	3.91%	2.90%	1.01%		12-months	1.39%	
Nov-00	8.11%	5.78%	2.33%	Nov-04	5.97%			Nov-08	7.60%	4.00%	3.60%	Nov-12	3.84%	2.80%	1.04%		6-months	1.41%	
Dec-00	7.84%	5.49%	2.35%	Dec-04	5.92%			Dec-08	6.52%	2.87%	3.65%	Dec-12	4.00%	2.88%	1.12%		3-months	1.39%	
Jan-01	7.80%	5.54%	2.26%	Jan-05	5.78%			Jan-09	6.39%	3.13%	3.26%	Jan-13	4.15%	3.08%	1.07%				
Feb-01	7.74%	5.45%	2.29%	Feb-05	5.61%			Feb-09	6.30%	3.59%	2.71%	Feb-13	4.18%	3.17%	1.01%				
Mar-01	7.68%	5.34%	2.34%	Mar-05	5.83%			Mar-09	6.42%	3.64%	2.78%	Mar-13	4.20%	3.16%	1.04%				
Apr-01	7.94%	5.65%	2.29%	Apr-05	5.64%			Apr-09	6.48%	3.76%	2.72%	Apr-13	4.00%	2.93%	1.07%				
May-01	7.99%	5.78%	2.21%	May-05	5.53%			May-09	6.49%	4.23%	2.26%	May-13	4.17%	3.11%	1.06%				
Jun-01	7.85%	5.67%	2.18%	Jun-05	5.40%			Jun-09	6.20%	4.52%	1.68%	Jun-13	4.53%	3.40%	1.13%				
Jul-01	7.78%	5.61%	2.17%	Jul-05	5.51%			Jul-09	5.97%	4.41%	1.56%	Jul-13	4.68%	3.61%	1.07%				
Aug-01	7.59%	5.48%	2.11%	Aug-05	5.50%			Aug-09	5.71%	4.37%	1.34%	Aug-13	4.73%	3.76%	0.97%				
Sep-01	7.75%	5.48%	2.27%	Sep-05	5.52%			Sep-09	5.53%	4.19%	1.34%	Sep-13	4.80%	3.79%	1.01%				
Oct-01	7.63%	5.32%	2.31%	Oct-05	5.79%			Oct-09	5.55%	4.19%	1.36%	Oct-13	4.70%	3.68%	1.02%				
Nov-01	7.57%	5.12%	2.45%	Nov-05	5.88%			Nov-09	5.64%	4.31%	1.33%	Nov-13	4.77%	3.80%	0.97%				
Dec-01	7.83%	5.48%	2.35%	Dec-05	5.80%			Dec-09	5.79%	4.49%	1.30%	Dec-13	4.81%	3.89%	0.92%				
Jan-02	7.66%	5.45%	2.21%	Jan-06	5.75%			Jan-10	5.77%	4.60%	1.17%	Jan-14	4.63%	3.77%	0.86%				
Feb-02	7.54%	5.40%	2.14%	Feb-06	5.82%	4.54%	1.28%	Feb-10	5.87%	4.62%	1.25%	Feb-14	4.53%	3.66%	0.87%				
Mar-02	7.76%			Mar-06	5.98%	4.73%	1.25%	Mar-10	5.84%	4.64%	1.20%	Mar-14	4.51%	3.62%	0.89%				
Apr-02	7.57%			Apr-06	6.29%	5.06%	1.23%	Apr-10	5.81%	4.69%	1.12%	Apr-14	4.41%	3.52%	0.89%				
May-02	7.52%			May-06	6.42%	5.20%	1.22%	May-10	5.50%	4.29%	1.21%	May-14	4.26%	3.39%	0.87%				
Jun-02	7.42%			Jun-06	6.40%	5.15%	1.25%	Jun-10	5.46%	4.13%	1.33%	Jun-14	4.29%	3.42%	0.87%				
Jul-02	7.31%			Jul-06	6.37%	5.13%	1.24%	Jul-10	5.26%	3.99%	1.27%	Jul-14	4.23%	3.33%	0.90%				
Aug-02	7.17%			Aug-06	6.20%	5.00%	1.20%	Aug-10	5.01%	3.80%	1.21%	Aug-14	4.13%	3.20%	0.93%				
Sep-02	7.08%			Sep-06	6.00%	4.85%	1.15%	Sep-10	5.01%	3.77%	1.24%	Sep-14	4.24%	3.26%	0.98%				
Oct-02	7.23%			Oct-06	5.98%	4.85%	1.13%	Oct-10	5.10%	3.87%	1.23%	Oct-14	4.06%	3.04%	1.02%				
Nov-02	7.14%			Nov-06	5.80%	4.69%	1.11%	Nov-10	5.37%	4.19%	1.18%	Nov-14	4.09%	3.04%	1.05%				
Dec-02	7.07%			Dec-06	5.81%	4.68%	1.13%	Dec-10	5.56%	4.42%	1.14%	Dec-14	3.95%	2.83%	1.12%				
Nov-02	7.14%	5.04%	2.10%	Nov-07	5.97%	4.56%	1.41%	Nov-12	3.84%	2.39%	1.45%								

Average:  
12-months 1.39%  
6-months 1.41%  
3-months 1.39%

**Yields for Treasury Constant Maturities  
Yearly for 2010-2014 and 2015  
and the Twelve Months Ended May 2016**

<u>Years</u>	<u>1-Year</u>	<u>2-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>7-Year</u>	<u>10-Year</u>	<u>20-Year</u>	<u>30-Year</u>
2010	0.32%	0.70%	1.11%	1.93%	2.62%	3.22%	4.03%	4.25%
2011	0.18%	0.45%	0.75%	1.52%	2.16%	2.78%	3.62%	3.91%
2012	0.17%	0.28%	0.38%	0.76%	1.22%	1.80%	2.54%	2.92%
2013	0.13%	0.31%	0.54%	1.17%	1.74%	2.35%	3.12%	3.45%
2014	0.12%	0.46%	0.90%	1.64%	2.14%	2.54%	3.07%	3.34%
<b>Five-Year Average</b>	<u>0.18%</u>	<u>0.44%</u>	<u>0.74%</u>	<u>1.40%</u>	<u>1.98%</u>	<u>2.54%</u>	<u>3.28%</u>	<u>3.57%</u>
2015	0.32%	0.69%	1.03%	1.53%	1.89%	2.14%	2.55%	2.84%
<b><u>Months</u></b>								
Jun-15	0.28%	0.69%	1.07%	1.68%	2.10%	2.36%	2.85%	3.11%
Jul-15	0.30%	0.67%	1.03%	1.63%	2.04%	2.32%	2.77%	3.07%
Aug-15	0.38%	0.70%	1.03%	1.54%	1.91%	2.17%	2.55%	2.86%
Sep-15	0.37%	0.71%	1.01%	1.49%	1.88%	2.17%	2.62%	2.95%
Oct-15	0.26%	0.64%	0.93%	1.39%	1.76%	2.07%	2.50%	2.89%
Nov-15	0.48%	0.88%	1.20%	1.67%	2.02%	2.26%	2.69%	3.03%
Dec-15	0.65%	0.98%	1.28%	1.70%	2.04%	2.24%	2.61%	2.97%
Jan-16	0.54%	0.90%	1.14%	1.52%	1.85%	2.09%	2.49%	2.86%
Feb-16	0.53%	0.73%	0.90%	1.22%	1.53%	1.78%	2.20%	2.62%
Mar-16	0.66%	0.88%	1.04%	1.38%	1.68%	1.89%	2.28%	2.68%
Apr-16	0.56%	0.77%	0.92%	1.26%	1.57%	1.81%	2.21%	2.62%
May-16	0.59%	0.82%	0.97%	1.30%	1.60%	1.81%	2.22%	2.63%
<b>Twelve-Month Average</b>	<u>0.47%</u>	<u>0.78%</u>	<u>1.04%</u>	<u>1.48%</u>	<u>1.83%</u>	<u>2.08%</u>	<u>2.50%</u>	<u>2.86%</u>
<b>Six-Month Average</b>	<u>0.59%</u>	<u>0.85%</u>	<u>1.04%</u>	<u>1.40%</u>	<u>1.71%</u>	<u>1.94%</u>	<u>2.34%</u>	<u>2.73%</u>
<b>Three-Month Average</b>	<u>0.60%</u>	<u>0.82%</u>	<u>0.98%</u>	<u>1.31%</u>	<u>1.62%</u>	<u>1.84%</u>	<u>2.24%</u>	<u>2.64%</u>



**Measures of the Risk-Free Rate & Corporate Bond Yields**

The forecast of Treasury and Corporate yields  
per the consensus of nearly 50 economists  
reported in the Blue Chip Financial Forecasts dated June 1, 2016

Year	Quarter	Treasury					Corporate	
		1-Year Bill	2-Year Note	5-Year Note	10-Year Note	30-Year Bond	Aaa Bond	Baa Bond
2016	Second	0.6%	0.8%	1.3%	1.9%	2.7%	3.7%	4.9%
2016	Third	0.8%	1.0%	1.5%	2.1%	2.9%	3.9%	5.1%
2016	Fourth	1.0%	1.2%	1.7%	2.2%	3.0%	4.1%	5.2%
2017	First	1.2%	1.4%	1.9%	2.4%	3.2%	4.3%	5.4%
2017	Second	1.4%	1.6%	2.1%	2.6%	3.3%	4.4%	5.5%
2017	Third	1.6%	1.8%	2.3%	2.7%	3.4%	4.6%	5.7%

**Measures of the Market Premium**

Value Line Return			
As of:	Dividend Yield	Median Appreciation Potential	Median Total Return
27-May-16	2.3%	+ 10.67%	= 12.97%

DCF Result for the S&P 500 Composite				
D/P	( 1+.5g )	+	g	= k
2.11%	( 1.0377 )	+	7.54%	= 9.73%

where:	Price (P)	at	31-May-16	=	2096.95
	Dividend (D)	for	1st Qtr. '16	=	11.04
	Dividend (D)		annualized	=	44.16
	Growth (g)	by	First Call	=	7.54%

Summary			
Value Line			12.97%
S&P 500			9.73%
Average			11.35%
Risk-free Rate of Return (Rf)			3.75%
Forecast Market Premium			7.60%
Historical Market Premium (Rm)		(Rf)	
1926-2014 Arith. mean	12.14%	4.06%	8.08%
Average - Forecast/Historical			7.84%

**Comparable Earnings Approach**

Using Non-Utility Companies with

Timeliness of 2 & 3; Safety Rank of 2 & 3; Financial Strength of B, B+, B++ & A;

Price Stability of 85 to 100; Betas of .55 to .75; and Technical Rank of 1, 2, 3 & 4

Company	Industry	Timeliness Rank	Safety Rank	Financial Strength	Price Stability	Beta	Technical Rank
AutoZone Inc	Retail Automotive	2	3	B	95	0.70	2
CBOE Holdings Inc	Brokers & Exchanges	2	3	B++	85	0.75	3
Capitol Federal Financial Inc	Thrift	3	2	B+	100	0.65	2
Dr Pepper Snapple Group Inc	Beverage	2	2	A	95	0.75	3
Erie Indemnity Company	Insurance (Prop/Cas.)	2	2	B++	95	0.75	3
Forrester Research, Inc.	Information Services	3	3	B+	85	0.70	4
Hershey Company	Food Processing	3	2	B++	100	0.65	3
Mercury General Corp	Insurance (Prop/Cas.)	3	2	B++	90	0.70	2
Northwest Bancshares Inc	Thrift	3	2	B+	100	0.75	3
O Reilly Automotive Inc	Retail Automotive	2	2	A	85	0.75	3
Verisk Analytics Inc	Information Services	2	2	B++	90	0.75	2
WD 40 Co	Household Products	2	2	A	85	0.75	3
Weis Markets	Retail/Wholesale Food	3	2	A	85	0.75	3
Average		2	2	B++	92	0.72	3
Water Group	Average	3	3	B++	92	0.69	2

Source of Information: Value Line Investment Survey for Windows, May 2016

**Comparable Earnings Approach**

Five -Year Average Historical Earned Returns  
for Years 2011-2015 and  
Projected 3-5 Year Returns

Company	2011	2012	2013	2014	2015	Average	Projected 2019-21
AutoZone Inc	-	-	-	NMF	NMF	-	NMF
CBOE Holdings Inc	59.0%	65.8%	61.9%	75.9%	79.0%	68.3%	29.0%
Capitol Federal Financial Inc	3.3%	4.1%	4.2%	5.2%	5.5%	4.5%	6.0%
Dr Pepper Snapple Group Inc	26.8%	26.9%	26.5%	30.6%	35.0%	29.2%	31.0%
Erie Indemnity Company	21.4%	24.9%	22.1%	24.0%	22.7%	23.0%	28.5%
Forrester Research, Inc.	10.1%	8.6%	9.7%	13.2%	16.1%	11.5%	16.0%
Hershey Company	76.4%	71.4%	52.6%	61.6%	91.2%	70.6%	42.0%
Mercury General Corp	8.2%	6.3%	6.6%	6.7%	7.1%	7.0%	12.0%
Northwest Bancshares Inc	5.6%	5.6%	5.8%	5.8%	5.2%	5.6%	8.0%
O Reilly Automotive Inc	18.4%	27.8%	34.1%	38.6%	47.5%	33.3%	22.0%
Verisk Analytics Inc	-	NMF	NMF	NMF	37.0%	37.0%	17.5%
WD 40 Co	18.1%	19.1%	22.2%	25.8%	28.4%	22.7%	31.0%
Weis Markets	10.1%	10.4%	9.1%	6.4%	6.8%	8.6%	7.5%
Mean						26.8%	20.9%
Median						22.9%	19.8%
Average (excluding values <8% and >20%)						10.1%	12.2%

### **Comparable Earnings Approach**

#### Screening Parameters

##### Timeliness Rank

The rank for a stock's probable relative market performance in the year ahead. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the year-ahead market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next 12 months. Stocks ranked 3 (Average) will probably advance or decline with the market in the year ahead. Investors should try to limit purchases to stocks ranked 1 (Highest) or 2 (Above Average) for Timeliness.

##### Safety Rank

A measure of potential risk associated with individual common stocks rather than large diversified portfolios (for which Beta is good risk measure). Safety is based on the stability of price, which includes sensitivity to the market (see Beta) as well as the stock's inherent volatility, adjusted for trend and other factors including company size, the penetration of its markets, product market volatility, the degree of financial leverage, the earnings quality, and the overall condition of the balance sheet. Safety Ranks range from 1 (Highest) to 5 (Lowest). Conservative investors should try to limit purchases to equities ranked 1 (Highest) or 2 (Above Average) for Safety.

##### Financial Strength

The financial strength of each of the more than 1,600 companies in the VS II data base is rated relative to all the others. The ratings range from A++ to C in nine steps. (For screening purposes, think of an A rating as "greater than" a B). Companies that have the best relative financial strength are given an A++ rating, indicating ability to weather hard times better than the vast majority of other companies. Those who don't quite merit the top rating are given an A+ grade, and so on. A rating as low as C++ is considered satisfactory. A rating of C+ is well below average, and C is reserved for companies with very serious financial problems. The ratings are based upon a computer analysis of a number of key variables that determine (a) financial leverage, (b) business risk, and (c) company size, plus the judgment of Value Line's analysts and senior editors regarding factors that cannot be quantified across-the-board for companies. The primary variables that are indexed and studied include equity coverage of debt, equity coverage of intangibles, "quick ratio", accounting methods, variability of return, fixed charge coverage, stock price stability, and company size.

##### Price Stability Index

An index based upon a ranking of the weekly percent changes in the price of the stock over the last five years. The lower the standard deviation of the changes, the more stable the stock. Stocks ranking in the top 5% (lowest standard deviations) carry a Price Stability Index of 100; the next 5%, 95; and so on down to 5. One standard deviation is the range around the average weekly percent change in the price that encompasses about two thirds of all the weekly percent change figures over the last five years. When the range is wide, the standard deviation is high and the stock's Price Stability Index is low.

##### Beta

A measure of the sensitivity of the stock's price to overall fluctuations in the New York Stock Exchange Composite Average. A Beta of 1.50 indicates that a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Average. Use Beta to measure the stock market risk inherent in any diversified portfolio of, say, 15 or more companies. Otherwise, use the Safety Rank, which measures total risk inherent in an equity, including that portion attributable to market fluctuations. Beta is derived from a least squares regression analysis between weekly percent changes in the price of a stock and weekly percent changes in the NYSE Average over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. The Betas are periodically adjusted for their long-term tendency to regress toward 1.00.

##### Technical Rank

A prediction of relative price movement, primarily over the next three to six months. It is a function of price action relative to all stocks followed by Value Line. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next six months. Stocks ranked 3 (Average) will probably advance or decline with the market. Investors should use the Technical and Timeliness Rank as complements to one another.